

REMARKS

This communication responds to the Office Action mailed on July 8, 2005. Claims 1 and 11 are amended, no claims are canceled, and no claims are added. As a result, claims 1-16 are now pending in this Application.

Information Disclosure Statement

The Applicant submitted an Information Disclosure Statement and a 1449 Form on September 5, 2003. The Applicant respectfully requests that an initialed copy of the 1449 Form be returned to the Applicant's Representatives to indicate that the cited documents have been considered by the Examiner.

Double Patenting Rejection

Claims 1-16 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,648,204. A Terminal Disclaimer in compliance with 37 CFR 1.321(b) (IV) is enclosed herewith; this rejection is therefore moot.

§102 Rejection of the Claims

Claims 1 and 11 were rejected under 35 USC § 102(b) as being anticipated by Karavakis (U.S. 5,663,106; hereinafter "Karavakis"). First, the Applicants do not admit Karavakis is prior art and reserve the right to swear behind this reference in the future. Second, because the Applicants assert that Karavakis does not disclose the identical invention as claimed, the Applicants respectfully traverse these rejections of the claims (as amended).

It is respectfully noted that anticipation under 35 USC § 102 requires the disclosure in a single prior art reference of each element of the claim under consideration.

See Verdegaal Bros. V. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). It is not enough, however, that the prior art reference discloses all the claimed elements in isolation. Rather, “[a]nticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, *arranged as in the claim*.” *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). “The *identical invention* must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP § 2131 (emphasis added).

Claims 1 and 11 have been amended to make clear that the alignment weight claimed by the Applicant includes depressions formed so as to hold pins in substantially vertical alignment (corresponding to the phrase “substantially straight-up alignment” used in claim 7), and not for reasons related to patentability. The dimples 48 of Karavakis are simply not able to function in this capacity.

As noted in Karavakis, the shield 46 relies “upon the deformability of the rubber material to surround and protect the terminals.” Karavakis, Col. 7, lines 6-10. Karavakis also states “... some pressure must be applied to cause the rubber material to surround the terminals 26 ...”. Karavakis, Col. 7, lines 11-12. Thus, the shield 46 of Karavakis is deformable, and would permit adjacent pins to come out of alignment if an attempt was made to use it in the manner described by the Applicant.

Second, the shield 46 of Karavakis can not serve as an alignment weight because some embodiments of the Applicant’s invention (e.g., claims 4 and 13) have holes 110, which are “cylindrical passages through [the] alignment weight 100” that “allow heat to flow through [the] alignment weight 100 toward a printed circuit board located below the alignment weight 100 during a reflow process.” Application, Pg. 4, lines 18-25 and claims 11-12. Karavakis states that the shield 46 should act to “prevent the flow of the encapsulation material towards the terminals 26 on the chip carrier 14.” Adding holes to the shield of Karavakis would permit encapsulation material to leak onto the terminals 26. *See* Karavakis, Col. 6, lines 64-66 and Col. 7, lines 3-14.

In short, what is disclosed by Karavakis is not identical to the subject matter of the embodiments claimed. Reconsideration and allowance of claims 1 and 11 is respectfully requested.

§103 Rejection of the Claims

Claims 1-16 were rejected under 35 USC § 103(a) as being unpatentable over Matsui (U.S. 5,743,009; hereinafter "Matsui") in view of "Applicant's Admitted Prior Art" (hereinafter "AAPA"). First, the Applicant does not admit that Matsui is prior art and reserves the right to swear behind this reference in the future. Second, since a *prima facie* case of obviousness has not been established as required by M.P.E.P. § 2142, the Applicant respectfully traverses these rejections.

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d (BNA) 1596, 1598 (Fed. Cir. 1988). In combining prior art references to construct a *prima facie* case, the Examiner must show some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art that would lead an individual to combine the relevant teaching of the references. *Id.* The M.P.E.P. contains explicit direction to the Examiner that agrees with the *In re Fine* court:

In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicants disclosure. *M.P.E.P.* 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d (BNA) 1438 (Fed. Cir. 1991)).

An invention can be obvious even though the suggestion to combine prior art teachings is not found in a specific reference. *In re Oetiker*, 977 F.2d 1443, 24 U.S.P.Q.2d (BNA) 1443 (Fed. Cir. 1992). However, while it is not necessary that the cited references or prior art specifically suggest making the combination, there must be

some teaching somewhere which provides the suggestion or motivation to combine prior art teachings and applies that combination to solve the same or similar problem which the claimed invention addresses. One of ordinary skill in the art will be presumed to know of any such teaching. (See, e.g., *In re Nilssen*, 851 F.2d 1401, 1403, 7 U.S.P.Q.2d 1500, 1502 (Fed. Cir. 1988) and *In re Wood*, 599 F.2d 1032, 1037, 202 U.S.P.Q. 171, 174 (C.C.P.A. 1979)). The requirement of a suggestion or motivation to combine references in a *prima facie* case of obviousness is emphasized in the Federal Circuit opinion, *In re Sang Su Lee*, 277 F.3d 1338; 61 U.S.P.Q.2D 1430 (Fed. Cir. 2002), which notes that the motivation must be supported by evidence in the record.

No proper *prima facie* case of obviousness has been established because either: (1) combining the references does not teach all of the limitations set forth in the claims, (2) there is no motivation to combine the references, or (3) combining the references provides no reasonable expectation of success. Each of these points will be explained in detail, as follows.

Combining The References Does Not Teach All Claim Limitations.

First, with respect to independent claims 1, 7, and 11, it is respectfully noted that Matsui does not disclose an apparatus wherein “selected ones of the number of depressions are configured to receive only one of the pins” (claim 1), or wherein “each of the plurality of depressions is configured to receive only one of the pins of the floating pin field”, or having “a plurality of pins adjacent the circuit board and a corresponding plurality of depressions in the alignment weight” (claim 11). Rather, Matsui teaches a “grooved jig 215”, which has “[a] number of grooves 216 ... formed in a lower surface of the grooved jig 215.” Such grooves are not the same as the depressions claimed by the Applicant, and would be unable to hold individual pins in substantially “straight-up” or “vertical” alignment, as claimed by the Applicant. See Matsui, Col. 6, lines 52-53. In fact, Matsui must use grooves because *chains* of contact pin parts are held, rather than individual pins. The AAPA also fails in this respect.

Therefore, no combination of Matsui or AAPA can provide the missing elements claimed by the Applicant in independent claims 1, 7, and 11, and a *prima facie* case of obviousness has not been established. Further, it is respectfully noted that if an

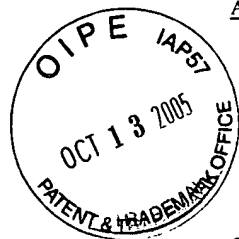
independent claim is nonobvious under 35 USC § 103, then any claim depending therefrom is also nonobvious. *See* M.P.E.P. § 2143.03. Therefore, claims 2-6, 8-10, and 12-16 are also nonobvious.

Combining the References Provides No Reasonable Expectation of Success.

Modifying Matsui's grooved jig 215 to incorporate the AAPA's carrier would result in breaking off the connection members between the pins before soldering is complete. *See* Matsui, Col. 8, lines 8-21. Further, there is no evidence in the record to support the assertion by the Office that the AAPA discloses "substantially circular holes" as recited in the Office Action. Even if such was disclosed, there is no evidence in the record that this modification would "accommodate pressing against the singular pins in order to ensure the pin parts are connected to the circuit board." Thus, one of skill in the art would not have any reasonable expectation of success in combining Matsui and AAPA.

The use of an unsupported assertion by the Office does not satisfy the explicit requirements set forth by the *In re Sang Su Lee* court. *In re Sang Su Lee*, 277 F.3d 1338; 61 U.S.P.Q.2D 1430 (Fed. Cir. 2002) (motivation must be supported by evidence in the record). Thus, the Examiner appears to be using personal knowledge, and is thus respectfully requested to submit an affidavit as required by 37 C.F.R. § 1.104(d)(2).

In summary, none of the references disclose an apparatus wherein "selected ones of the number of depressions are configured to receive only one of the pins," or wherein "each of the plurality of depressions is configured to receive only one of the pins of the floating pin field," or having "a plurality of pins adjacent the circuit board and a corresponding plurality of depressions in the alignment weight" as set forth in independent claims 1, 7, and 11. No reasonable expectation of success results from any combination of the cited references. The requirements of *M.P.E.P.* § 2142 have not been satisfied, and a *prima facie* case of obviousness has not been established with respect to these independent claims. All dependent claims are also nonobvious, since claims depending from nonobvious independent claims are also nonobvious. It is therefore respectfully requested that the rejections to claims 1-16 under 35 U.S.C. § 103 be reconsidered and withdrawn.

**CONCLUSION**

The Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone the Applicant's attorney, Mark Muller at (210) 308-5677, or the Applicant's below-named representative to facilitate the prosecution of this Application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

CHERYL M. WALDRON-FLOYDE ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER &
KLUTH, P.A.

Attorneys for Intel Corporation
P.O. Box 2938
Minneapolis, Minnesota 55402
(612) 349-9592

Date Oct. 10, 2005

By Ann M. McCrackin
Ann M. McCrackin
Reg. No. 42,858

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this ___ 11th ___ day of October 2005.

John D. Gurbur-Warshall

Name

John D. Gurbur-Warshall
Signature